

CLAIMS

What is claimed is:

- 5 1. A method of treating Down Syndrome, said method comprising:
treating a person having Down Syndrome with an effective amount of a
compound selected from the group consisting of phenserine, (+)9-N-phenylcarbinol
esroline, a pharmaceutically acceptable salt thereof, and combinations thereof.
- 10 2. The method according to claim 1, wherein the compound is a pharmaceutically
acceptable salt of phenserine selected from the group consisting of the tartrate, phosphate,
and fumarate salt.
3. The method according to claim 1, wherein the effective amount ranges from 0.001
15 gram to 1 gram per kilogram of body mass of the person.
4. The method according to claim 1, wherein the compound comprises (+) 9-N-
phenylcarbinol esroline and pharmaceutically acceptable salts thereof.
- 20 5. The method according to claim 1, wherein the compound comprises phenserine or
pharmaceutically acceptable salts thereof.
6. A method for treating Down Syndrome in a person, said method comprising:
administering a pharmaceutical composition to the person comprising an effective
25 amount of phenserine, (+)9-N-phenylcarbinol esroline, pharmaceutically acceptable salts
thereof, or combinations thereof as the effective ingredient.
7. The method according to claim 6, wherein the pharmaceutically acceptable salt is
selected from the group consisting of the tartrate, phosphate, and fumarate salt.
- 30 8. The method according to claim 7, wherein the effective amount ranges from 0.001
gram to 1 gram per kilogram of body weight of the person.

THIS PAGE BLANK (USPTO)

9. The method according to claim 6, wherein the pharmaceutical composition compound comprises (+)9-N-phenylcarbinol esroline and pharmaceutically acceptable salts thereof.
10. The method according to claim 6, wherein the pharmaceutical composition comprises
5 phenserine and pharmaceutically acceptable salts thereof.
11. Use of an effective amount of a compound selected from the group consisting of phenserine, (+) 9-N-phenylcarbinol esroline, a pharmaceutically acceptable salt thereof, and combinations thereof for the manufacture of a medicament for the treatment of Down
10 Syndrome.
12. Use of claim 11, wherein the compound is a pharmaceutically acceptable salt of phenserine selected from the group consisting of the tartrate, phosphate, and fumarate salts.
15
13. Use of claim 11, wherein the compound is a pharmaceutically acceptable salt of (+) 9-N-phenylcarbinol selected from the group consisting of the tartrate, phosphate, and fumarate salts.
14. Use of claim 12, wherein the effective amount is between 5 to 60 mg per
20 administration.
15. Use of claim 11, wherein the medicament is formulated to be administered once or twice a day.
25
16. Use of claim 11, wherein the compound is (+) 9-N-phenylcarbinol esroline or a pharmaceutically acceptable salt thereof.
17. Use of claim 16, wherein the compound is a pharmaceutically acceptable tartrate salt
30 of (+) 9-N-phenylcarbinol esroline.
18. Use of claim 11, wherein the compound comprises phenserine.

19. Use of claim 18, wherein the compound is a pharmaceutically acceptable tartrate salt of phenserine.

20. A method of manufacturing a pharmaceutical preparation for the treatment of Down Syndrome or preventing or delaying complications associated with Down Syndrome, said
5 method comprising incorporating phenserine, (+)-phenserine, pharmaceutically acceptable salts thereof, or combinations thereof into said pharmaceutical preparation.